

Abstract

The invention is directed to an autostereoscopic three-dimensional liquid crystal display system and a method of making the system. The system comprises a collimated backlight, a first light diffracting hologram, a second right-left interlacing hologram and a liquid crystal display. If the backlight is not collimated, a micro-collimator array is used to collimate the backlight prior to passing into the first hologram. The second right-left interlacing hologram is formed through a two step process. The process comprises positioning a photolithographic mask and a view region mask in a first position, recording the first holographic recording in the first position, shifting the photolithographic mask and the view region mask to a second position and recording the second holographic recording in the second position.